

## CLAIM SUMMARY DOCUMENT

1. (Original) An ethylene polymer having:

(A) a density of from 0.930 to 0.970 g/cm<sup>3</sup>,

(B) a ratio (Mw/Mn) of a weight average molecular weight (Mw) to a number average molecular weight (Mn), as measured by GPC, of from 1.2 to 10, and

(C) a ratio (MFR<sub>10</sub>/MFR<sub>2</sub>) of a melt flow rate (MFR<sub>10</sub>) at 190°C under a load of 10 Kg to a melt flow rate (MFR<sub>2</sub>) at 190°C under a load of 2.16 Kg of from 16.2 to 50.

2. (Original) An ethylene polymer having:

(A) a density of 0.921 g/cm<sup>3</sup> or more but less than 0.930 g/cm<sup>3</sup>,

(B) a ratio (Mw/Mn) of a weight average molecular weight (Mw) to a number average molecular weight (Mn), as measured by GPC, of from 1.2 to 4.0, and

(C) a ratio (MFR<sub>10</sub>/MFR<sub>2</sub>) of a melt flow rate (MFR<sub>10</sub>) at 190°C under a load of 10 Kg to a melt flow rate (MFR<sub>2</sub>) at 190°C under a load of 2.16 Kg of from 12 to 50.

3. (Original) An ethylene polymer having:

(A) a density of from 0.850 to 0.970 g/cm<sup>3</sup>,

(B) a ratio (Mw/Mn) of a weight average molecular weight (Mw) to a number average molecular weight (Mn), as measured by GPC, of from 1.2 to 10, and

(D) a relation of  $\omega_2 / \omega_1 \geq 18$  where  $\omega_1$  and  $\omega_2$  denote angular velocity (rad/sec) when complex elastic modulus  $G^*$  (dyne/cm<sup>2</sup>) at 200°C is  $5.0 \times 10^5$  dyne/cm<sup>2</sup> and  $2.0 \times 10^6$  dyne/cm<sup>2</sup>, respectively, which are determined by measurement of the angular velocity dependence of the complex elastic modulus of the copolymer.

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4. (Original) A process for preparing an ethylene polymer, which process comprises preparing said ethylene polymer in the presence of an olefin polymerization catalyst comprising an organic hafnium compound having at least one substituted cyclopentadienyl group and an organic boron compound essentially, wherein the ethylene polymer has:

(A) a density of from 0.850 to 0.970 g/cm<sup>3</sup>,

(B) a ratio (Mw/Mn) of a weight average molecular weight (Mw) to a number average molecular weight (Mn), as measured by GPC, of from 1.2 to 10, and

(C) a ratio (MFR<sub>10</sub>/MFR<sub>2</sub>) of a melt flow rate (MFR<sub>10</sub>) at 190°C under a load of 10 Kg to a melt flow rate (MFR<sub>2</sub>) at 190°C under a load of 2.16 Kg of from 12 to 50.

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5. (Original) A process for preparing an ethylene polymer, which process comprises preparing said ethylene polymer in the presence of an olefin polymerization catalyst comprising an organic hafnium compound having at least one substituted cyclopentadienyl group and an organic boron compound essentially, wherein the ethylene polymer has:

(A) a density of from 0.850 to 0.970 g/cm<sup>3</sup>,

(B) a ratio (Mw/Mn) of a weight average molecular weight (Mw) to a number average molecular weight (Mn), as measured by GPC, of from 1.2 to 10, and

(D) a relation of  $\omega_2 / \omega_1 \geq 13$  where  $\omega_1$  and  $\omega_2$  denote angular velocity (rad/sec) when complex elastic modulus  $G^*$  (dyne/cm<sup>2</sup>) at 200°C is  $5.0 \times 10^5$  dyne/cm<sup>2</sup> and  $2.0 \times 10^6$  dyne/cm<sup>2</sup>, respectively, which are determined by measurement of the angular velocity dependence of the complex elastic modulus of the copolymer.

6. (Cancelled)

7. (Currently Amended) A molded ~~articles~~ article selected from the group consisting of (a) injection molded articles, (b) hollow or extrusion molded articles, (c) rotational molded articles, (d) film or sheet molded articles and (e) extrusion coated molded articles, which article comprises, as an essential component, the ethylene polymer as claimed in claim 1.

8. (Currently Amended) A molded ~~articles~~ article selected from the group consisting of (a) injection molded articles, (b) hollow or extrusion molded articles, (c) rotational molded articles, (d) film or sheet molded articles and (e) extrusion coated molded articles, which article comprises, as an essential component, the ethylene polymer as claimed in claim 2.

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9. (Currently Amended) A molded ~~articles~~ article selected from the group consisting of (a) injection molded articles, (b) hollow or extrusion molded articles, (c) rotational molded articles, (d) film or sheet molded articles and (e) extrusion coated molded articles, which article comprises, as an essential component, the ethylene polymer as claimed in claim 3.

10. (Currently Amended) A molded ~~articles~~ article selected from the group consisting of (a) injection molded articles, (b) hollow or extrusion molded articles, (c) rotational molded articles, (d) film or sheet molded articles and (e) extrusion coated molded

articles, which article comprises, as an essential component, the ethylene polymer as claimed in claim 4.

11. (Currently Amended) A molded ~~articles~~ article selected from the group consisting of (a) injection molded articles, (b) hollow or extrusion molded articles, (c) rotational molded articles, (d) film or sheet molded articles and (e) extrusion coated molded articles, which article comprises, as an essential component, the ethylene polymer as claimed in claim 5.

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